



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,394	02/13/2004	Cory J. Doble	582AC [2681.3171.001]	9010

7590 01/28/2008  
William H. Francis  
Reising Ethington Bames Kisselle P.C.  
P.O. Box 4390  
Troy, MI 48099-4390

EXAMINER
----------

HWU, DAVIS D

ART UNIT	PAPER NUMBER
----------	--------------

3752

MAIL DATE	DELIVERY MODE
-----------	---------------

.01/28/2008

.PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/779,394

Applicant(s)

DOBLE ET AL.

Examiner

Davis D. Hwu

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-21, 23, 25-33 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 5, 9-11, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 15, 17, 19, 21, 23, 25, 26, 28, 29, 32, 33, 35, 36, 38 and 39 is/are rejected.
- 7) ☒ Claim(s) 16, 18, 20, 27, 30, 31 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

***Response to Amendment***

1. Applicant's amendment and arguments of November 2, 2007 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

3. Claims 1, 2, 32, 33, 35, 36, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reef et al. in view of Fournier et al.

Reef et al. discloses a fuel pump module comprising a reservoir 16, a high pressure fuel pump 14, and a jet pump 10 as recited supplying fuel to the reservoir, the jet pump having a nozzle having an outlet and an inlet in fluid communication with the outlet of the high pressure fuel pump 14. Reef et al. do not disclose at least one restrictor plate as recited. Fournier et al. teach a fuel pump module comprising a reservoir 26, a nozzle 28 supplying fuel to the reservoir, a high pressure fuel pump 14 having an inlet communicating with the reservoir and having an outlet of pressurized fuel, and a restrictor plate 30 between the outlet of the fuel pump and the inlet of the nozzle 28. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Reef et al. by incorporating a restrictor plate between the outlet of the fuel pump and the inlet of the nozzle of the jet pump as taught by the concept of Fournier et al. to control fuel flow. Reef et al. also discloses the reservoir 16 having an inlet and the outlet of the nozzle being generally adjacent the inlet of the reservoir as recited in claim 2. Regarding claim 32, it is obvious to one having ordinary skill in the art that the pressure of the fuel upstream of the restrictor

plate would have to be greater than the pressure of the fuel between the restrictor plate and the inlet of the nozzle in order to move the fuel.

4. Claims 3, 15, 17, 19, 21, 23, 25, 26, 28, 29, 32, 33, 35, 36, 38, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich et al. in view of Fournier et al.

Rich et al. discloses a fuel pump module comprising a reservoir 20 having an inlet, a high pressure fuel pump 38 having an inlet (from hose 62) communicating with the reservoir and having an outlet of pressurized fuel, a nozzle as recited, and a venturi 60 axially spaced between the nozzle and the inlet of the reservoir as recited. Rich et al. do not disclose a restrictor plate. Fournier et al. teach a fuel pump module comprising a restrictor plate in a fluid circulation path. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Rich et al. by incorporating a restrictor plate between the outlet of the fuel pump and the inlet of the nozzle of the jet pump as taught by the concept of Fournier et al. to control fuel flow. Having a pair of restrictor plates as recited in claim 25 would have been an obvious of design choice since such a modification would have involved a mere duplication of working parts.

5. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich et al. in view of Fournier et al. and Itatsu

Rich et al. discloses a fuel pump module comprising a reservoir 20, a high pressure fuel pump 38 having an inlet (from hose 62) communicating with the reservoir and having an outlet, a nozzle as recited, and a return line 62 as recited in claim 7. Rich et al. do not

disclose a pair of restrictor plates. Fournier et al. teach a fuel pump module comprising a restrictor plate in a fluid circulation path and Itatsu teaches a fuel transfer device comprising a plurality of restrictor plates 51-53. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Rich et al. by incorporating a pair restrictor plate between the outlet of the fuel pump and the inlet of the nozzle of the jet pump as taught by the concept of Fournier et al. and Itatsu to control fuel flow. Forming a pair restrictor plates would have been obvious since such a modification would have involved a mere deletion of on of the plates of Itatsu.

***Allowable Subject Matter***

6. Claims 16, 18, 20, 27, 30, 31, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 4, 5, 9-11, 13, and 14 are allowed.

***Response to Arguments***

8. Applicant's arguments filed November 02, 2007 have been fully considered but they are not persuasive. As stated above, Reef discloses the structural limitations of the instant invention except for the restrictor plate and Fournier et al. is used to simply teach incorporating a restrictor plate in a fuel circuit of fuel transfer arrangements is well know in the art to held control the flow of fuel.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-

Application/Control Number:  
10/779,394  
Art Unit: 3752

Page 5

4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.



Primary Examiner